

Early challenges for Canadian Mining Eye in 2018



Building a better working world

Canadian Mining Eye

Q1 2018

A Q&A with Stephen Letwin, President & CEO, IAMGOLD **page 4**



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Index comparisons	Q1 2018	Q4 2017
Canadian Mining Eye index	-8%	4%
UK Mining Eye	-10%	2%
S&P/TSX Composite Metals and Mining index	-6%	4%
Mining Majors index ¹	-6%	7%

First-quarter results show a decline in Canadian Mining Eye index performance over Q4 2017. Mining Majors index performance mirrored this trend.

- ▶ **Gold:** Gold prices increased 2% in Q1 2018 consistent with the growth witnessed in Q4 2017. Improvement in prices was due to rising geopolitical risks and dollar weakness, offset partially by the recent US Federal Reserve rate hike of 0.25% in March.
- ▶ **Base metals:** Nickel prices increased 4% in Q1 2018, compared with 22% gains in Q4 2017. Copper prices decreased 7%, and zinc prices declined by 2% in Q1 2018. Copper prices declined during the quarter following a 12% gain in Q4 2017, which was largely driven by supply disruption concerns.

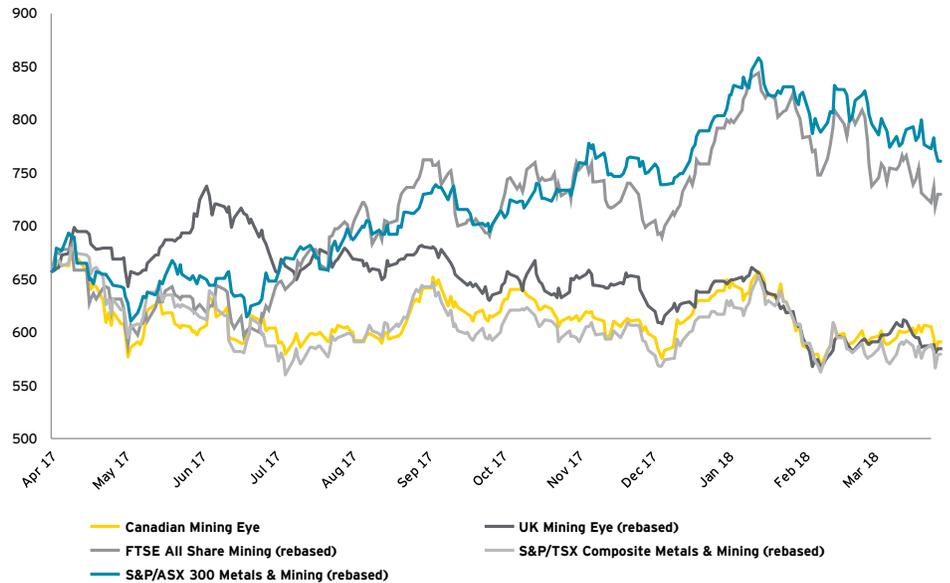
Based on the 2018 operating guidance released by the majority of Canadian gold mining companies, average production is expected to be flat to slightly lower due to reducing grade, mine closures and suspensions. The all-in sustaining cost (AISC) is expected to track higher in 2018 on account of a weaker US dollar and rising input costs. This, coupled with higher capex expectations, is anticipated to put downward pressure on free cash flow generation in 2018.²

¹ Top 20 – TSX mining companies

² Scotiabank, "2018 Guidance Review: Costs Beginning to Escalate," 6 March 2018



Canadian Mining Eye index and peers, last 12 months



Source: EY, Thomson Datastream

According to Barrick Gold and Newmont Mining, total production is expected to trend lower in the near to medium term. Barrick Gold anticipates production to hover within the range of 4.2 Moz to 4.6 Moz during the period 2020-22, representing a 16% decline from 2017 levels. Newmont Mining expects production to decline around 8% during the same period to a range between 4.6 Moz and 5.1 Moz.³

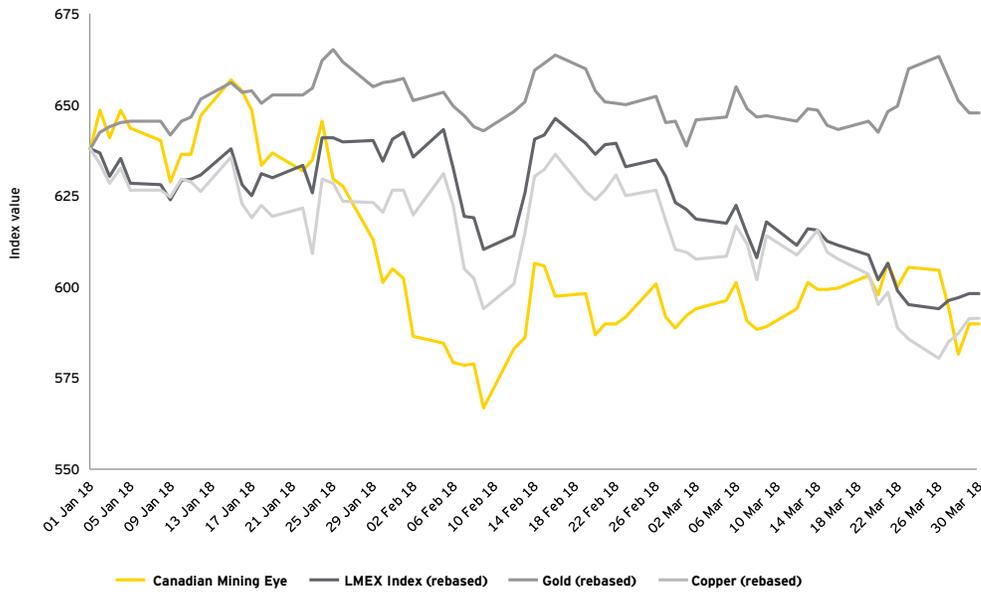
Newmont Mining further indicated that organic project pipeline within the industry is weakening. The decline in mine supply was also substantiated by Barrick Gold, which expects it to be flat to slightly lower in the near term. Barrick indicated that the majority of the market participants are generally optimistic of gold prices going forward.

M&A activity in the global gold sector will continue to be weighted towards small and opportunistic deals in 2018.⁴ [Mergers, acquisitions and capital raising in mining and metals - 2018 outlook](#) outlines how senior gold miners are investing in junior mining companies to replenish reserves. Recent activity includes Goldcorp's investment in both Exeter Resources and Triumph Resources, Newmont Mining in Continental Gold, and Barrick Gold in ATAC Resources.

³ Barrick Corporation, "Investor Day 2018," 22 February 2018; Newmont Mining, "Investor Presentation 2018," March 2018.

⁴ Thomson Reuters, "Small remains beautiful for gold mining acquisitions," 24 January 2018.

Canadian Mining Eye index, gold, copper and LME Index over Q1 2018



Source: EY, Thomson Datastream

Outlook

Gold prices have held up above US\$1,300 in Q1 2018. With additional rate hikes by the US Federal Reserve expected later this year, they are anticipated to be challenged in 2018 primarily due to the strength of the US dollar. At the recent Federal Open Market Committee meeting, the Federal Reserve also increased its expectations for 2018 US GDP growth from 2.5% announced in December to 2.7%, and from 2.1% to 2.4% in 2019.⁵ On the positive side, continued strong demand trends from both China and India, coupled with ongoing geopolitical risks, are expected to provide support to gold prices.⁶

In base metals, copper prices are slated to benefit from the growing adoption of electric vehicles (EVs). EV-driven copper demand is expected to increase from 185,000 tonnes in 2017 to 1.74 million tonnes in 2027.⁷ However, in the near to medium term, copper prices may soften but this is largely dependent on the extent to which supply is disrupted.⁸ The copper price rallied in December over concerns that labor negotiations may disrupt over 7 million tonnes of copper production in 2018.⁹

Zinc prices are still expected to trend higher in 2018 due to favorable market conditions. Market research suggests zinc prices will peak this year with the industry remaining in considerable supply deficit, particularly in the first half of 2018.¹⁰ However, global supply is expected to increase in 2019 on the back of additional supply from Lady Loretta mine (expected to restart in the first half of 2018), MMG's Dugald River project in Australia and Vedanta's Gamsberg mine in South America.¹¹

The long-term outlook for nickel remains positive, underscored by increased demand for batteries used in EVs. However, nickel prices are expected to be under slight pressure in 2018 on account of surplus market conditions, given higher supply from Indonesia and a sluggish demand outlook in China.¹² Indonesia is anticipated to account for 25% of the world's nickel ore production in 2018.¹³

⁵ CNBC, "Fed hikes rates and raises GDP forecast again," 21 March 2018.

⁶ Nasdaq.com, "Gold Mining Stock Outlook - January 2018," 16 January 2018.

⁷ MetalMiner, "Copper Had a Big 2017, but What Does 2018 Hold?," 23 January 2018.

⁸ Macquarie Research, "Macquarie: Canada Essentials: Osisko Metals - A Refreshing Look at Canada's Zinc Camps," 20 February 2018; Mining Journal, "Copper to fade in 2018," 19 January 2018.

⁹ MetalBulletin, "Copper bulls set high bar for prices in 2018 after stellar December performance," 4 January 2018.

¹⁰ Mining Weekly, "Zinc, lead outlook bright but analysts expect peak pricing as soon as this year," 27 January 2018.

¹¹ Mining.com, "Zinc price hits fresh decade high," 12 January 2018.

¹² Mining Review, "The global downtrend of nickel is set to continue," 3 January 2018.

¹³ Wood Mackenzie, "Nickel: Five things to look for in 2018," 17 January 2018.

Q&A

with **Stephen Letwin**
President & CEO, IAMGOLD



What's your opinion of the mining sector today?

I have renewed optimism in the mining industry overall. While the Dow Jones Industrial Average staged a relatively quick recovery following the 2008 financial crisis, the collapse in the gold price after peaking at US\$1,920/oz in September 2011 was a prolonged one, triggering a cultural change. Companies renewed their focus on cost reduction, disciplined capital spending and strengthening balance sheets. At that time, all-in sustaining costs (AISC) were nearing US\$1,300/oz. The drop in gold prices until the end of December 2015 could have potentially put IAMGOLD in a vulnerable position, but we had sold off assets and significantly cut costs. We transitioned from a focus on long-cycle capacity to a more balanced approach between short-cycle and long-cycle capacity, whereby our short-cycle assets (expansion projects near existing operating mines) would generate cash flow to fund our long-cycle assets (major development and exploration projects).

The industry has learned hard lessons from the past and is committed to becoming more financially disciplined and focused on productivity improvements. While commodity prices have recovered, and exploration and development spending is increasing – particularly important to addressing reserve depletion – volatility will continue given increasing geopolitical tensions.

What's next for IAMGOLD?

As a result of our cultural shift during the recovery period, we've become much better at what we do. We're a much leaner company than we were before, with AISC below US\$1,000/oz. We expect that AISC will continue towards US\$800/oz, and our production will move towards 1.2 to 1.3 million oz by 2022. Less costly production will create stronger margins and nearly double our cash flows. We expect our net asset valuation (NAV) will increase by 25%-30%, and our stock will near the US\$10 mark. In 2016, we were the highest-performing stock among our peers, and number three in 2017. Our message today has become execute, communicate, execute, communicate – establish your milestones, execute on them, and communicate them to employees and shareholders, thereby communicating our positive outlook.

Over the next two years, we will hire 2,800 people. We need to be careful that we don't creep back to old habits. It's difficult to stay disciplined when the price of gold jumps. It is human nature to lose vigilance, but it's important to stick to your routines and objectives. During the downturn, we reduced exploration spending, but not to the level where it would jeopardize future growth.

Our balance sheet is essential to survival. We have approximately US\$831 million in cash, cash equivalents and short-term investments, and no financial challenges, as our debt is not due until 2025. Previously, our debt was due in 2020, but we moved the time horizon out by five years to 2025 and cut our principal by 40%. We've created a balance sheet that is sustainable and resilient to market shock. In commodities, it's important to be able to withstand the cycles.

Going forward, we will continue to focus on short-cycle capacity, so as to leverage our current infrastructure and high-rate of return projects to feed our long-cycle projects. This avoids having to issue shares, which would be dilutive to our shareholders.

In terms of operating geographies, we operate in North America, South America and West Africa. West Africa has always been perceived as higher risk than other regions, but we haven't found that to be entirely true. Having operated in the region for many years, we have a significant amount of security and ground intelligence to manage our operations and mitigate risk.

What are the key challenges faced by mining companies today?

Reserve depletion is the number one challenge for the industry in our opinion. It's critical to replace your gold reserves to stay in the game. Our gold reserves increased by 86% in 2017. There's also a gap in the skills required and available, given the increasing need for digital talent to transition to automated mines. We also see a shortage in the number of graduates from geological education programs. The lack of high-grade ore deposits means conventional mining is becoming increasingly challenging and expensive, since we now have to mine deeper and operate in remote jurisdictions.

These factors are made particularly difficult when you consider the long time horizon from discovery to production. As Peter Munk once told me, mining is the only industry where you need to spend billions before you make a penny. When you consider all the stages that are necessary, including pre-feasibility studies, feasibility studies and permitting, it can take 12 to 15 years to bring an NI 43-101-compliant resource into production.

What's your opinion about the future trend for gold prices and the future of the gold sector?

We're bullish on gold and believe the demand for gold as a safe haven will increase. An extremely volatile market, reflecting global trade wars, unpredictable policy changes in the US and elevated geopolitical risks, drives demand for gold as a hedge. London's leading physical gold retailer saw a 253% increase in physical gold sales year over year in March 2018. This is driven even further by supply constraints on gold resulting from reserve depletion. We also see more innovation, use of technology, autonomous mining and collaboration between mining companies, particularly relating to productivity and operating efficiencies.

There seems to be some complacency around gold equities given the shift in speculative money towards more fashionable sectors such as cannabis, cobalt/lithium and bitcoin. But whether these have staying power remains to be seen.

What's your view on digital mining, and what does it mean for IAMGOLD?

Moving towards automated mines is the way of the future for the mining industry. We're excited about this digital future as we move forward with our Côte Gold Project and the opportunity to increase the productivity of our existing mines through automation. Innovation at mine sites does not necessarily mean technological innovation, but also innovation around near-mine exploration, tweaking the sequence of operations, increasing overall productivity and emphasizing safety. It's often as simple as finding a better way to crush your rock.

In terms of practical strategies to drive digital mining successes, what's your advice for the sector?

Digital mining has the potential to create better, faster, more efficient and safer mining, but it needs to be done properly and over a realistic timeline. Success in building and operating digital mines isn't about just adopting the latest technologies; it's about making the investment where it makes sense. It's important to embed digital thinking in your strategies and culture, and to customize and implement in phases. And don't expect change overnight. It's also important to set up teams with the appropriate resources and skills, and ensure the right leadership is in place. This must be paired with the right incentives and measures to evaluate progress.



Index constituents selected at quarter end

Q1 2018	MV (CDN\$m)	Q1 2018	MV (CDN\$m)	Q1 2018	MV (CDN\$m)
Pan American Silver	3,143	SolGold	695	Northern Dynasty Minerals	341
Centamin	3,108	TMAC Resources	675	Avesoro Resources	337
Endeavour Mining	2,556	Torex Gold Resources	670	Anglo Pacific Group	333
Detour Gold	2,267	Continental Gold	661	Taseko Mines	331
Hudbay Minerals	2,247	Ero Copper	627	Gold Reserve	318
Centerra Gold	2,136	Altius Minerals	618	Denison Mines	313
OceanaGold	2,119	Alacer Gold	593	Lydian International	301
Osisko Gold Royalties	1,938	North American Palladium	574	Golden Star Resources	293
New Gold	1,892	Lithium Americas	572	Fission Uranium	291
Tahoe Resources	1,852	Silvercorp Metals	567	Barkerville Gold Mines	288
NovaGold Resources	1,792	Dundee Precious Metals	560	Brio Gold	282
Pretium Resources	1,552	Premier Gold Mines	553	Excelsior Mining	268
SSR Mining	1,464	Klondex Mines	544	Wesdome Gold Mines	256
Orocobre Limited	1,463	Atalaya Mining	542	Maverix Metals	254
First Majestic Silver	1,293	Sierra Metals	533	Mason Graphite	252
Arizona Mining	1,252	Osisko Mining	532	Imperial Metals	248
SEMAFO	1,183	Gold Standard Ventures	531	Great Panther Silver	248
Sandstorm Gold	1,120	Mountain Province Diamonds	514	NGEx Resources	244
MAG Silver	1,103	Nemaska Lithium	490	Harte Gold	241
Lundin Gold	1,070	Perseus Mining	486	First Mining Gold	240
Fortuna Silver Mines	1,063	Champion Iron	481	West African Resources	232
China Gold International Resources	1,031	Capstone Mining	467	Orla Mining	230
Trevali Mining	1,019	Stornoway Diamond	459	Garibaldi Resources	230
Nevsun Resources	880	Teranga Gold	459	First Cobalt	229
McEwen Mining	873	Sherritt International	441	Bear Creek Mining	226
Guyana Goldfields	833	Argonaut Gold	415	eCobalt Solutions	221
Eldorado Gold	832	Roxgold	395	Millennial Lithium	220
Clean TeQ Holdings	824	Endeavour Silver	390	Ascot Resources	192
Seabridge Gold	799	Sabina Gold & Silver	388	Victoria Gold	184
Cobalt 27 Capital	790	Leagold Mining	383	Neo Lithium	175
Lucara Diamond	780	Atlantic Gold	371	Critical Elements	156
NexGen Energy	772	Itafos	369	Alio Gold	115
Largo Resources	710	Polymet Mining	367		
Novo Resources	708	Dalradian Resources	345		

Source: EY, TSX and TSXV Market Intelligence Group

Shading represents index entrants

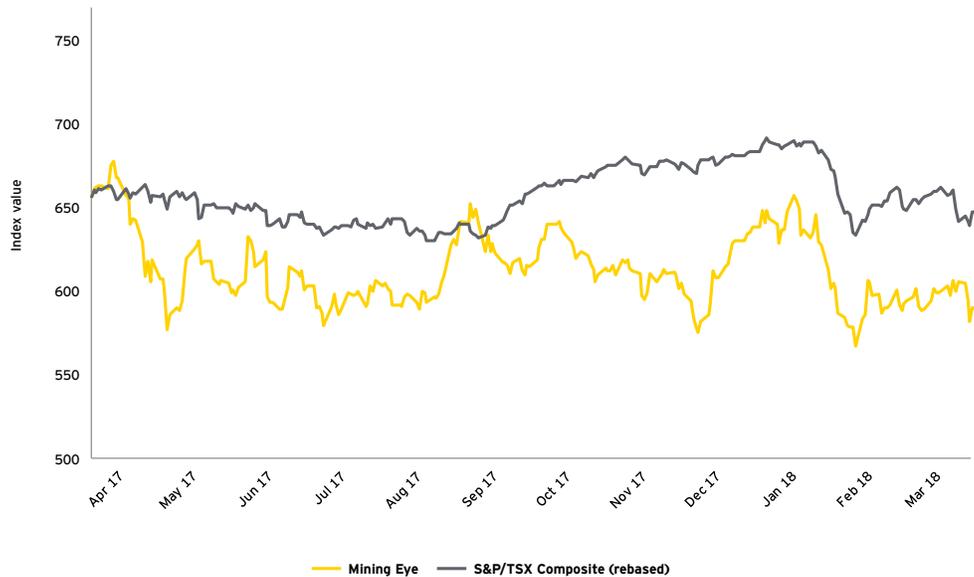
MV – Market value

Changes to the Canadian Mining Eye index

There were 13 changes in index constituents in Q1 2018. Nutrien, Alamos Gold, Katanga Mining and Nexa Resources were the new entrants in the Top 20 index. Katanga Mining, Alamos Gold, Belo Sun Mining, Cardinal Resources, Asanko Gold, GoldMining, Auryn Resources, Falco Resources, Americas Silver, Cornerstone Capital Resources, Alphamin Resources, Aurion Resources and AuRico Metals exited the index and were replaced by index entrants highlighted in the table above.

Index data

Canadian Mining Eye index and S&P/TSX Composite index performance, last 12 months



Source: EY, Thomson Datastream

Canadian Mining Eye index and S&P/TSX Composite index since 2008



Source: EY, Thomson Datastream

If you would like to view the raw index data, please contact:

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The Canadian Mining Eye tracks Canadian mining sector performance of 100 TSX and TSXV mid-tier and junior companies with market capitalizations at the end, broadly falling between CDN\$3.1b and CDN\$115m. These companies trade on the TSX and TSXV, though some of them are headquartered outside Canada. Movements and analysis of the index are reported quarterly. From Q1 2014, we have

retroactively reset the index to Top 20 and Next 100 (from Top 25 and Next 100) based on the market capitalizations at the end of 2013. The historical data has also been reset for comparatives purpose.

All company information is sourced from publicly available sources, including company websites and regulatory announcements.

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How EY's Global Mining & Metals Network can help your business

The sector is returning to growth, but mining and metals (M&M) companies face a transformed competitive and operating landscape. The need to improve shareholder returns will drive bold strategies to accelerate productivity, improve margins and better allocate capital to achieve long-term growth. Digital innovation will be a key enabler, but the industry must overcome a poor track record of technology implementations. If M&M companies are to survive and thrive in a new energy world, they must embrace digital to optimize productivity from market to mine.

EY takes a whole-of-value-chain approach to support each client to help seize the potential of digital to fast-track productivity, balance portfolios and set a clear road map for their new energy future.

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